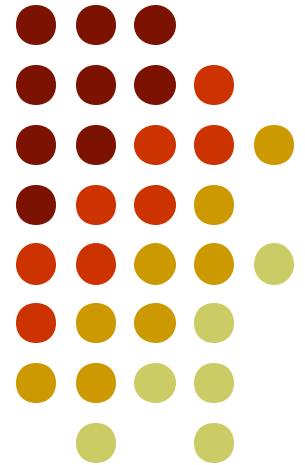
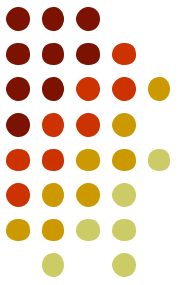


# Food Safety: Trade Barrier or Trade Enhancer?

Laurian Unnevehr, Professor  
Dept. of Agricultural and  
Consumer Economics  
University of Illinois

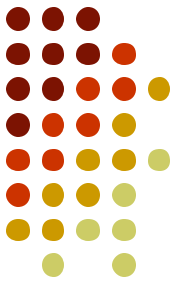




# Overview

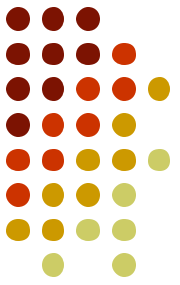
- **Food safety issues and disputes in trade are increasing due to changes in the global food system.**
- *But*, food safety is improving and barriers to trade are being reduced by public agencies and private industry.

# Food Safety Gets More Attention– Public health



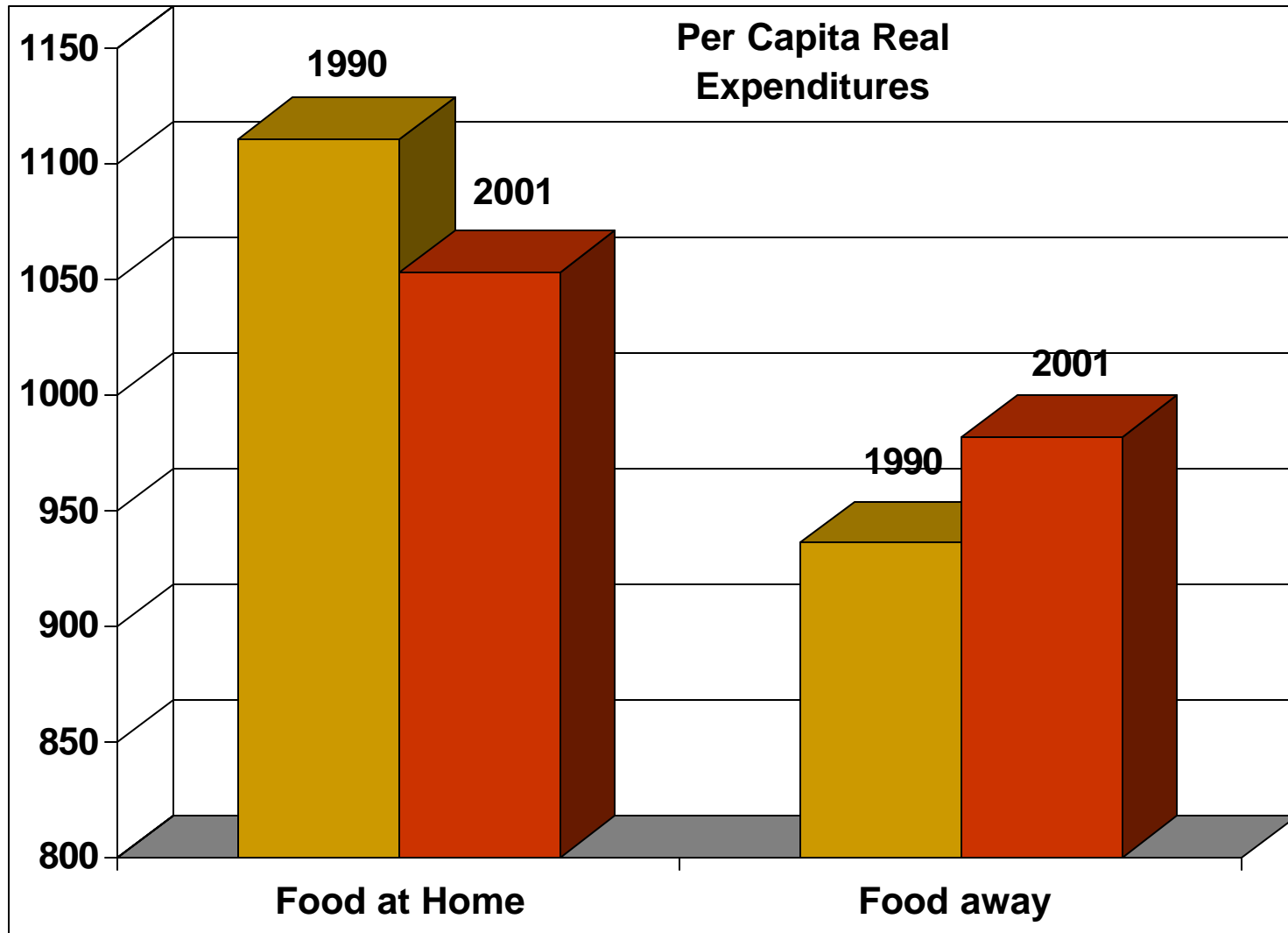
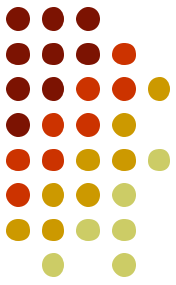
- Emerging pathogens, such as BSE / nvCJD and *E.coli* O157:H7
- Rising incidence of food borne illness in some countries
- Increased monitoring and understanding of long term consequences

# Food Safety Gets More Attention— Changing Food System

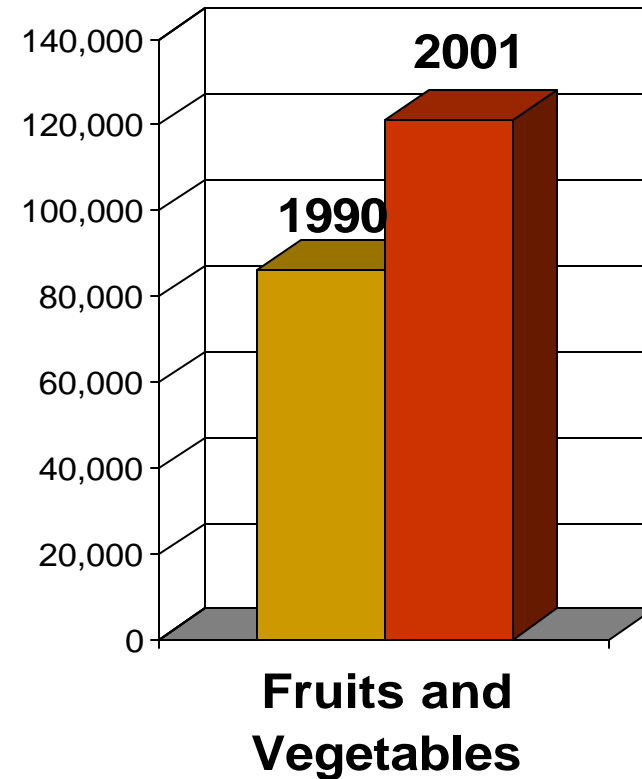
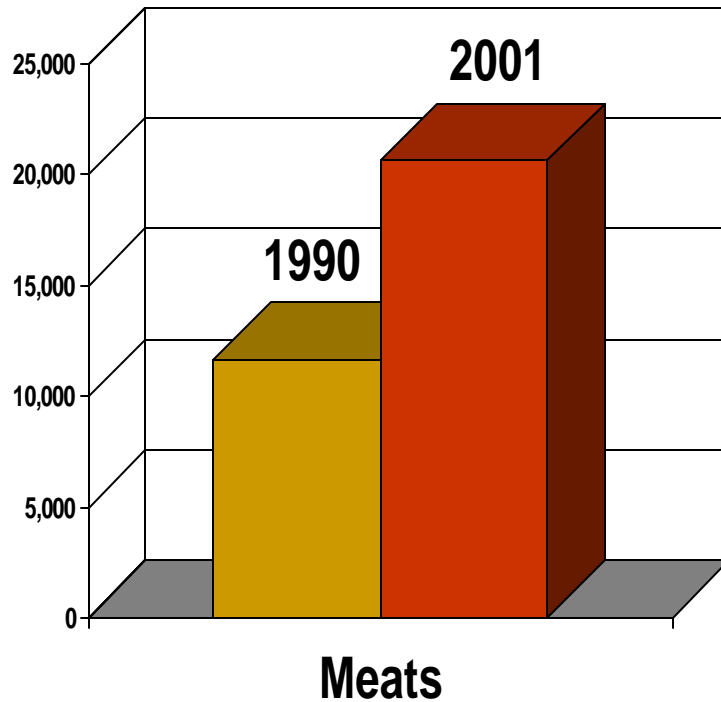


- More food prepared away from home
- International trade in fresh and minimally processed food products rising
- Increased consumption of animal and fish products and changes in how produced
- Growing consumer awareness, rising incomes lead to demand for greater safety

# U.S. Consumers Spend More on Food Away from Home



# World Trade in Perishables Has Increased



# Rich Countries Import Fish, Fruit, Vegetables & Export Meat, Cereals



Net imports (million mt)	High Income Countries	Developing Countries
Fish	9,857	-7,044
Fruit and Veg	33,195	-43,198
Meat	-3,031	1,591
Cereals	-119,197	113,151

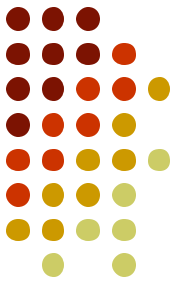
# Food Safety Gets More Attention– Rising Standards



- Existing standards made more stringent
  - U.S. FQPA for pesticide residues
  - EU mycotoxin standards
- New standards for emerging hazards
  - EU BSE regulations for feeds, traceability
  - U.S. Pathogen Reduction regulation

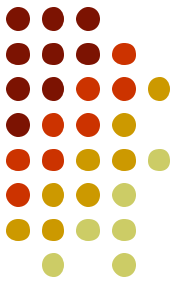


# Food Safety as a Potential Trade Barrier, and Vice Versa



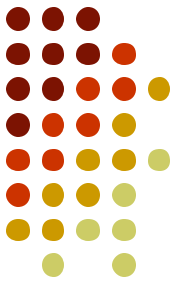
- Differences in how food is produced and eaten means risks vary
- Trade may introduce unfamiliar hazards or new hazards can disrupt trade
- Standards vary and may not be easy to enforce by testing at borders
- Costs associated with meeting varying standards, monitoring, certifying

# Food Safety Trade Issues for U.S. Commodities



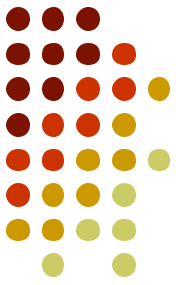
- Export sectors
  - market access
- Import sectors
  - consumer safety
- Both sectors
  - Product reputation
  - “Level playing field” in application of standards

# Food Safety Disputes in U.S. Export Sectors



- Meat and Poultry
  - Growth hormones
  - Antibiotic use
  - *Salmonella* standards
  - BSE
- Grains
  - use of animal by-products in feeds
  - GMO labeling

# Sample Case– BSE Regulations



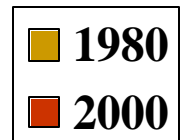
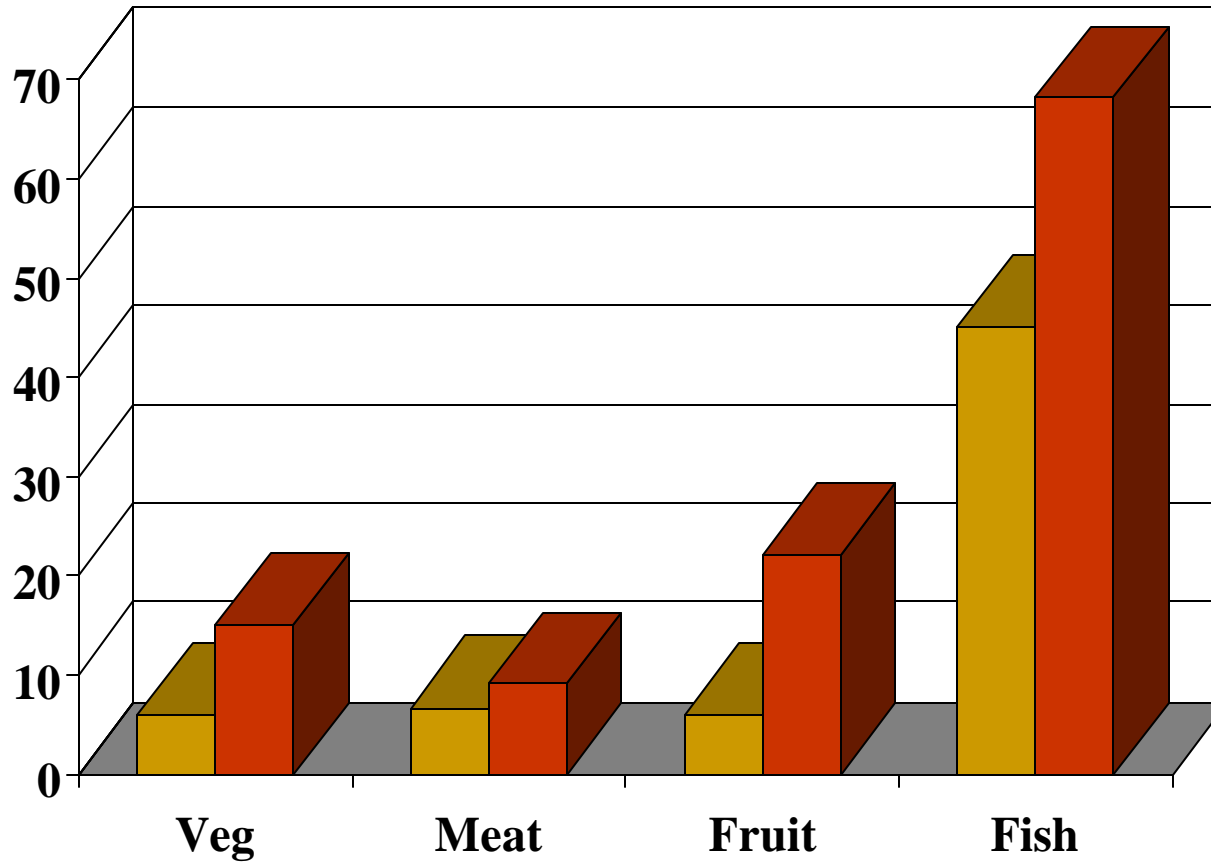
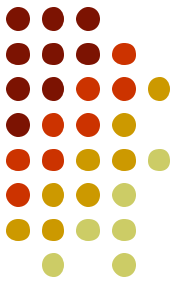
- U.S. should have advantage due to no infections and early feed use intervention
- EU regulations in 2000:
  - Put U.S. in next to lowest risk category
  - Excluded some U.S. beef by-products exports, eg pet food and gelatin
  - Requires greater separation of animal by-products in feed supply chain
- Emerging hazard has consequences even when U.S. not infected

# Food Safety Disputes for U.S. Imports



- Consumption and imports growing for seafood, fruits/vegetables
- Most imports are from LDCs
- Risks from imported food sources similar to risks from domestic sources
- Seafood—
  - microbial pathogens and other sanitary issues
- Fruits/vegetables—
  - pesticide residues, occasional microbial issues

# Import Share of U.S. Food Consumption Has Grown

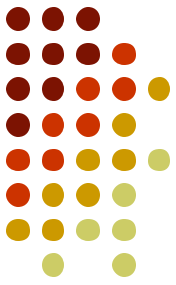


# FDA Import Detentions for Adulteration, 2001 (preliminary)



Product category	No. detentions	Most important reason
Vegetables	6,247	Pesticides
Fishery	5,561	<i>Salmonella</i>
Fruit	2,694	Filthy
Dairy	1,259	<i>Listeria</i>
Cereal	888	Filthy
TOTAL- all products	18,583	

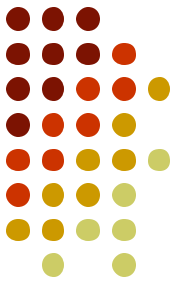
# Sample Case- Guatemalan Raspberries



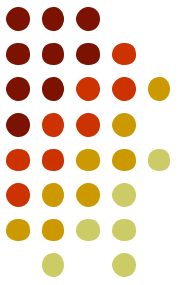
- 1996 outbreak of *Cyclospora* traced to Guatemalan raspberries
- 1997 voluntary export embargo; loss of market share to Mexico
- 1999 joint industry/govt program to manage and audit food safety; number of growers reduced
- Product reputation impact for U.S. producers— eg CA strawberries
- Development and use of FDA GAPs for domestic and foreign suppliers result from these kinds of outbreaks



# Summary of Issues for U.S. Commodities



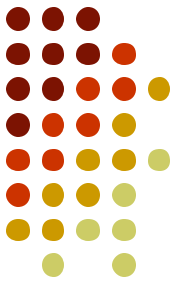
- Export sectors
  - Risk management is globally shared
  - Continued disagreements with EU over both risk standards and methods of risk management
- Import sectors
  - Technical assistance is playing a role in helping LDCs adapt to higher standards
  - U.S. producers can have new standards, product reputation impact



# Overview

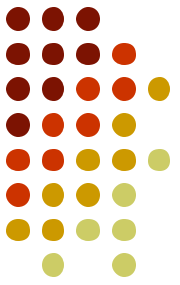
- Food safety issues and disputes in trade are increasing due to changes in the global food system.
- ***But, food safety is improving and barriers to trade are being reduced by public agencies and private industry.***

# Food Safety as a Potential Trade Enhancer, and Vice Versa



- Growing demand for quality attributes, including safety, is driving changes in food system
- Trade and value are enhanced for producers that can manage and certify product attributes
- Trade can provide alternatives for consumers and potentially lower costs of safety

# Reducing Barriers-- The Public Sector



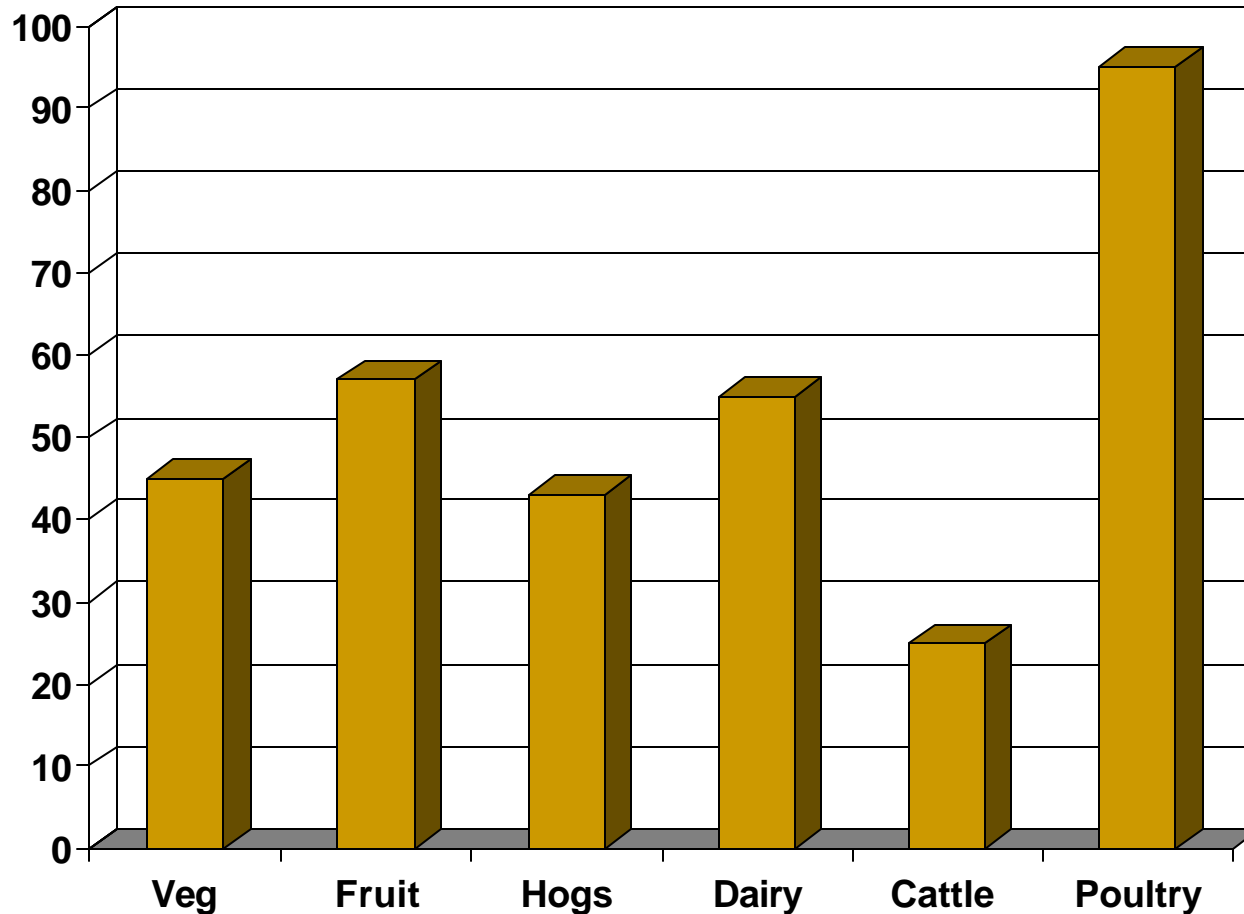
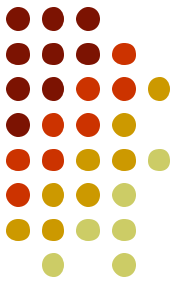
- Common approaches to food safety regulation emerging in industrialized nations
- HACCP used as regulatory standard with farm to table risk assessment
- New agencies formed in many countries with greater health focus
- Greater public role for certification of food safety and quality

# Reducing Barriers-- The Private Sector



- Safety is only one of many attributes that increasingly demanded by consumers
- Use of “meta-systems” for quality assurance such as HACCP, ISO 9000, GAPs
- Increased vertical coordination and use of contracting in all ag sectors
- Increased use of third party certification, sometimes in partnership with public sector

# Contract Production is Common for Many U.S. Commodities



**Percent of Production Under Contract, 1998**

# Public Sector Can Support Industry Food Safety Efforts



<b><i>Approach</i></b>	<b><i>Partnership Example</i></b>
<b>Guidelines</b>	<b>UK – <i>FABPIG</i> guidelines for farms to reduce <i>Salmonella</i> in pigs</b>  <b>US - <i>Good Agricultural Practices</i> to reduce microbial hazards in fresh fruits and vegetables</b>
<b>Third Party Certification</b>	<b>US - <i>Quality Through Verification</i> program certifies that fresh produce is produced under HACCP</b>  <b>Netherlands - <i>IKB</i> programs for livestock producers</b>

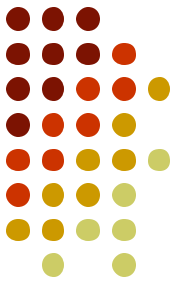
# Reducing Barriers– The SPS Agreement



- 1995 Uruguay Round result
- Principles for setting SPS standards
  - Transparency
  - Science-based
  - Equivalence
  - National sovereignty
  - Harmonization through Codex

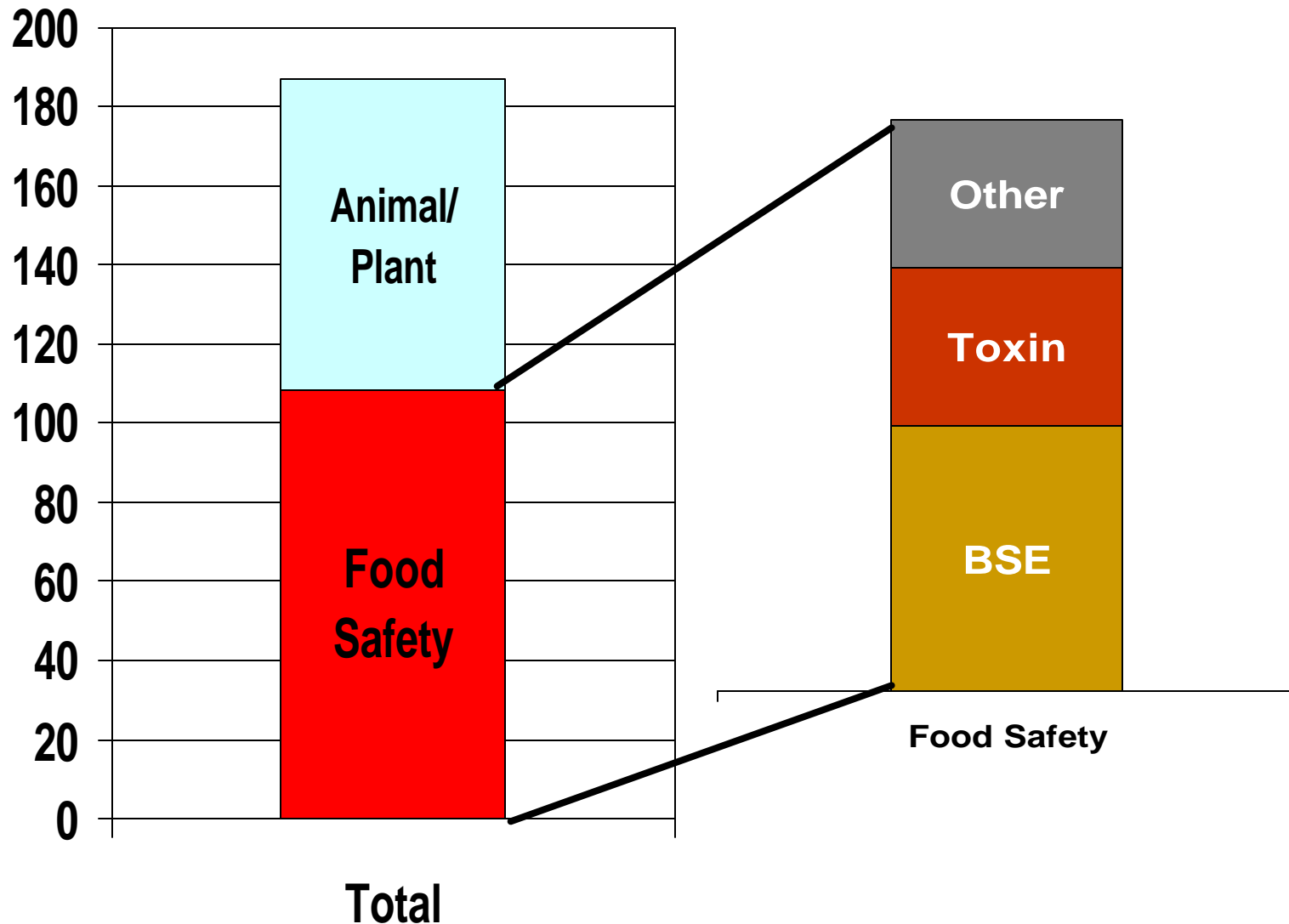


# SPS Agreement Progress in Dispute Resolution

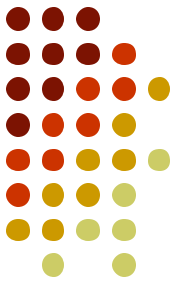


- Improved transparency and many disputes resolved before formal process
- Less progress on equivalency or harmonization
- Beef growth hormone dispute is unique, but does raise questions about the role of science and consumer perceptions

# Cross-Notifications Filed under SPS, 1995-2001

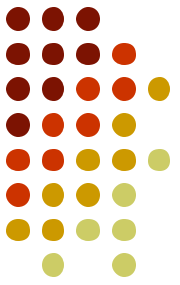


# Summing Up- Barrier or Enhancer?



- Good news-- enhancement underway
  - International food trade increasing in volume, value, variety with remarkably little disruption
  - Progress in
    - International framework
    - Common approaches to regulation
    - Use of private standards

# Summing Up– Barrier or Enhancer?



- Bad news-- barriers remain
  - Increased trade or new hazards create high profile disruptions in trade
  - Rising standards create challenges for new market entrants, particularly LDCs
  - Differences in risk perceptions and preferences make some disputes difficult to resolve

# Summing Up– Food Safety is an International Public Good



- Shared responsibility for food safety extends across borders
- Industry reputation and consumer health are international public goods
- Barriers can be reduced, industry reputation enhanced, consumer choice enlarged, and food safety improved